

Lithium Niobate

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Requirement

- It's a piezoelectric material with high coupling coefficient
- Lattice constant of 5.6 \AA
- Ideal for growth of Heusler compounds with similar lattice constants

Usage

- It will be used in PLD chamber, sputter and lithography tool
- The cleaning will be done by ultrasonication in acetone and IPA
- The deposition will be done at 400⁰ C for PLD and at room temperature in Sputter
- It is quite stable at room temperature (the hazardous levels are very low as well) and its melting point is 1275⁰ C
- Protective gears like hand gloves, face mask and safety goggles will be used while handling the substrate
- When not in use, it will be stored in evacuated dessicators